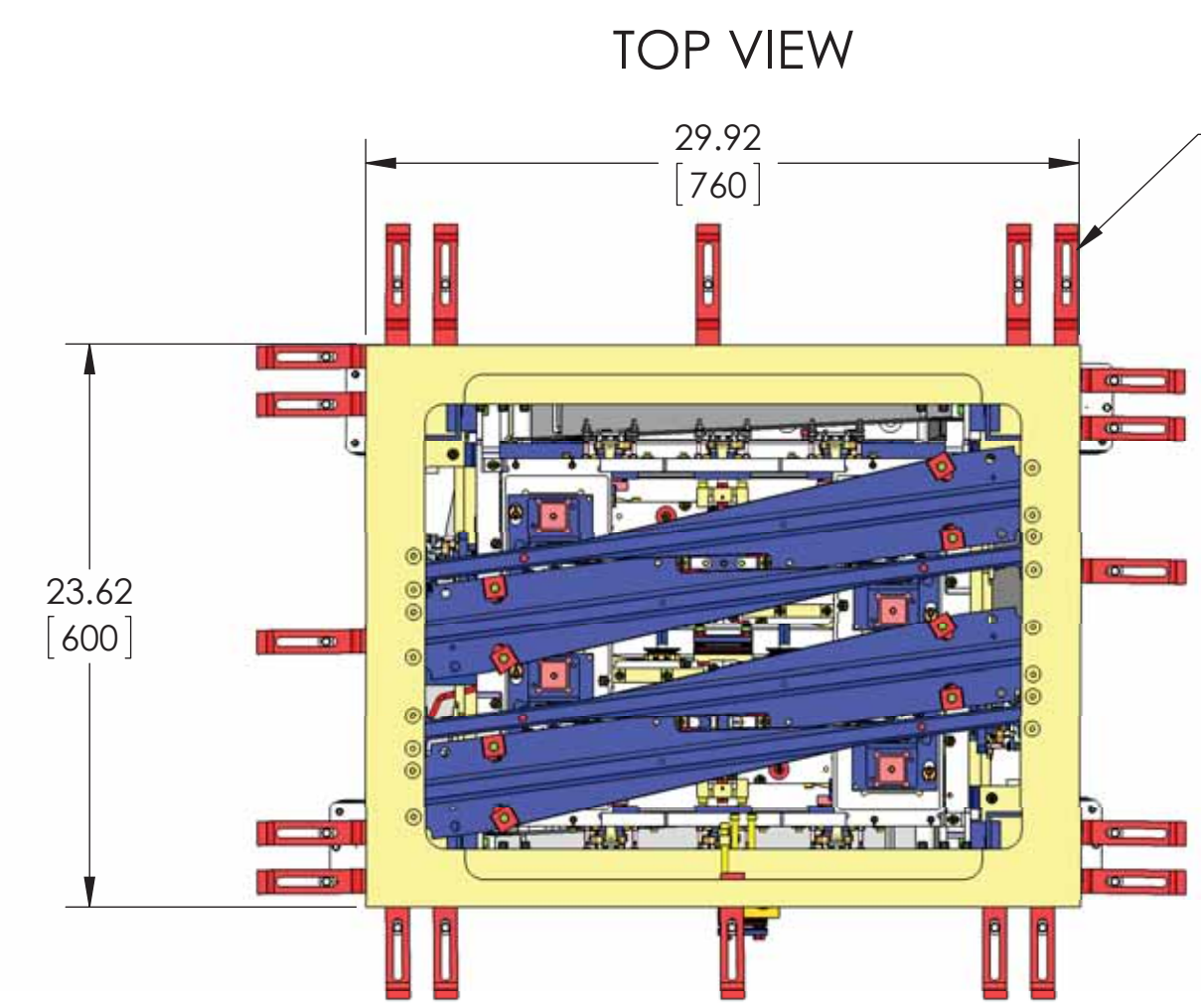
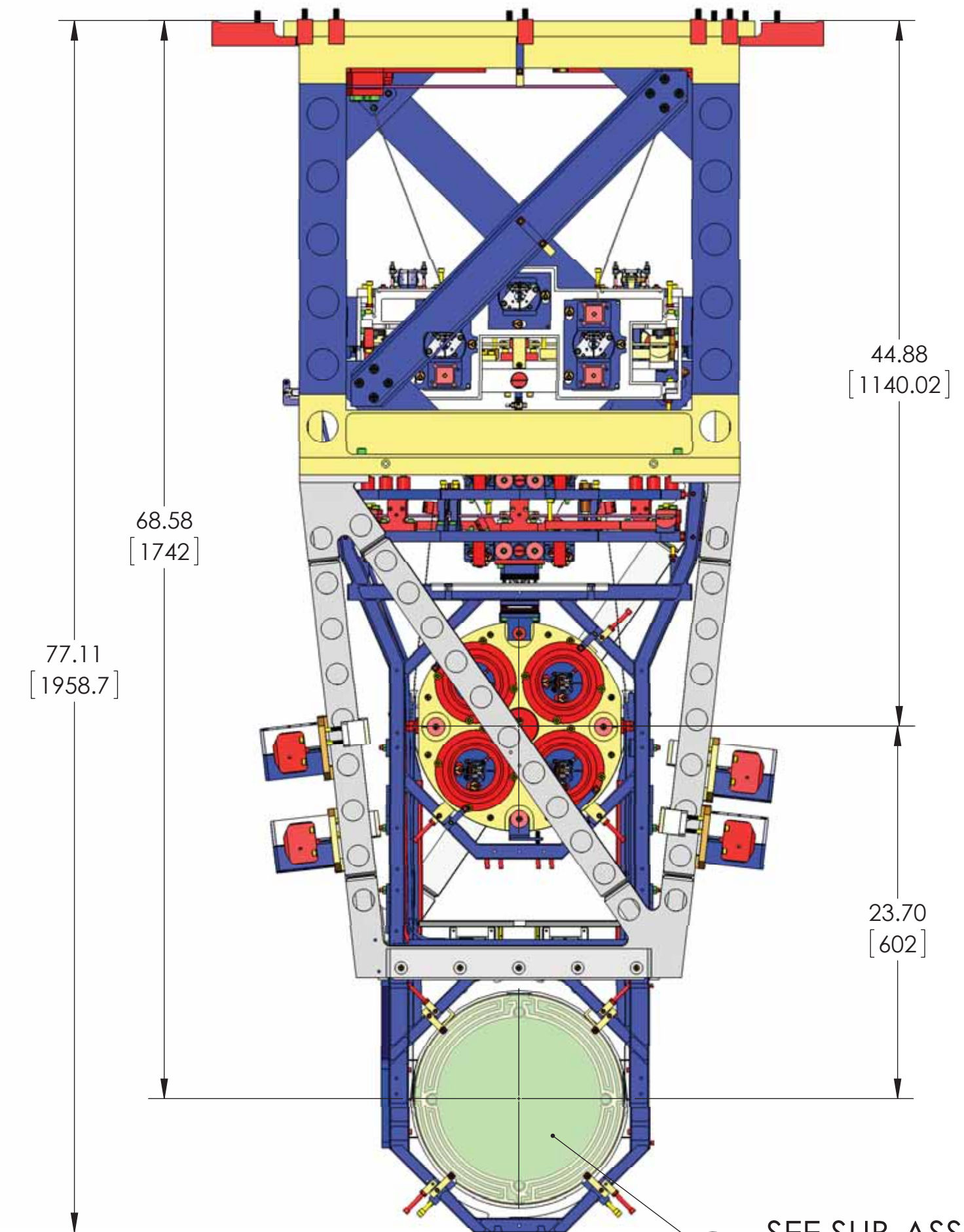


REV.	DATE	DCN #	DRAWING TREE #
v1	18 Jan. 2012	E1100696	-
v6	02 DEC 2014	-	-
v7	07 MAR 2014	E1300970-x0	-

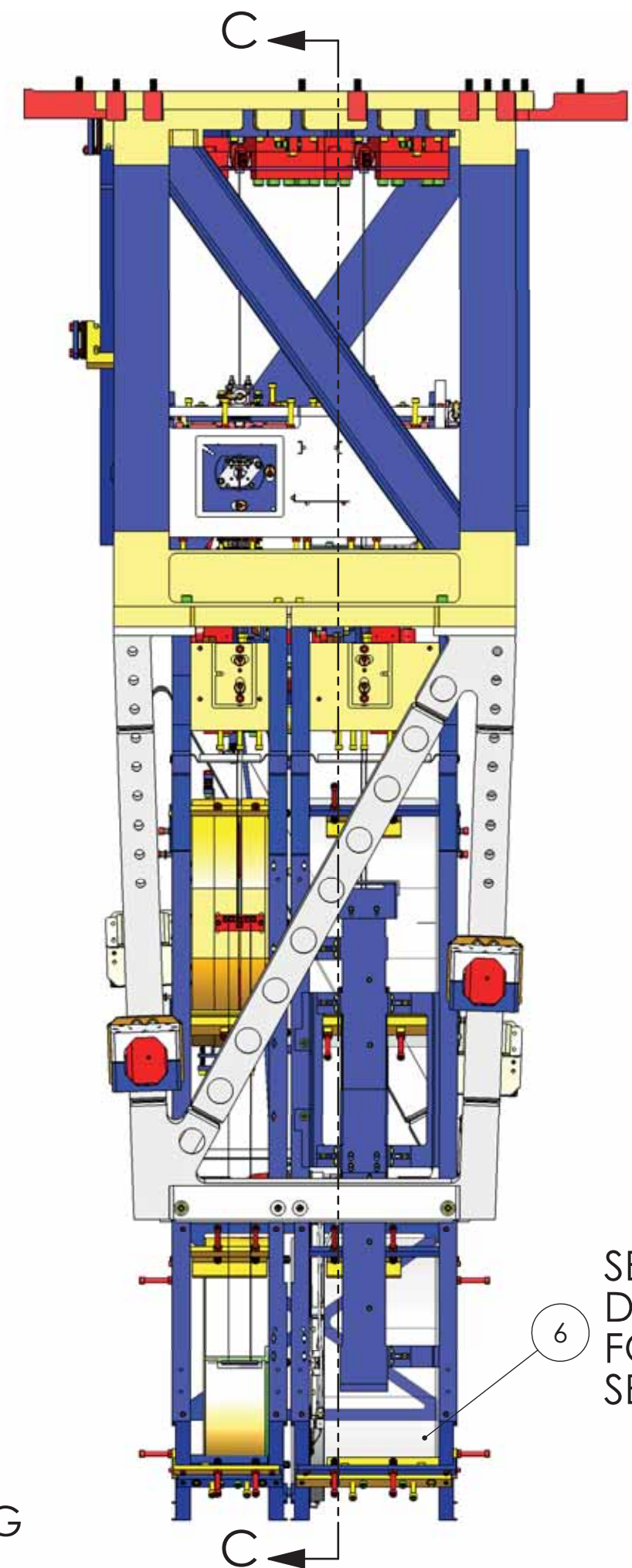


SEE SHEET 3 FOR DOG CLAMP PARTS AND LAYOUT

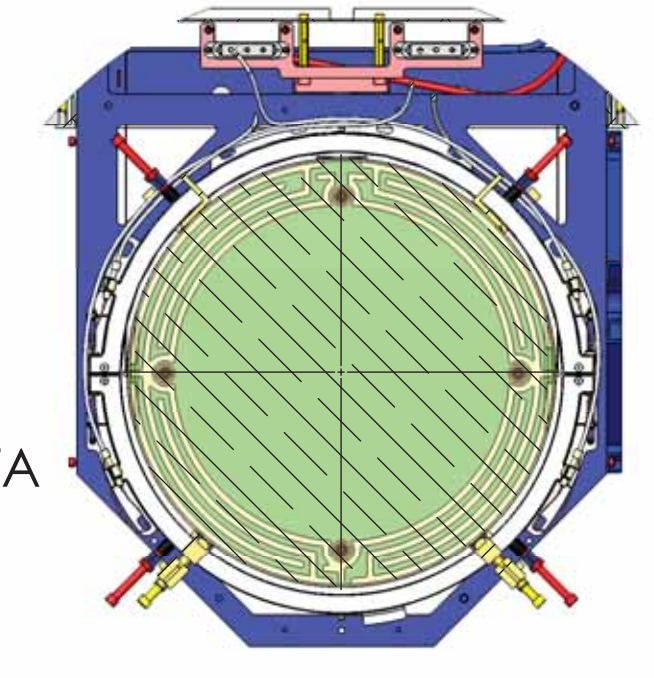
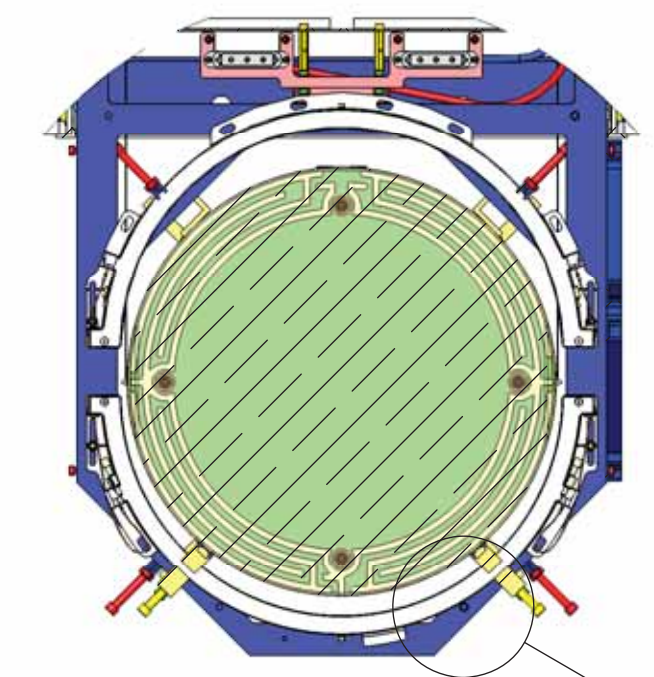
FOR QUAD TOOLING DETAILS, REFER TO QUAD MASTER DRAWING D0901346, SHEET 9



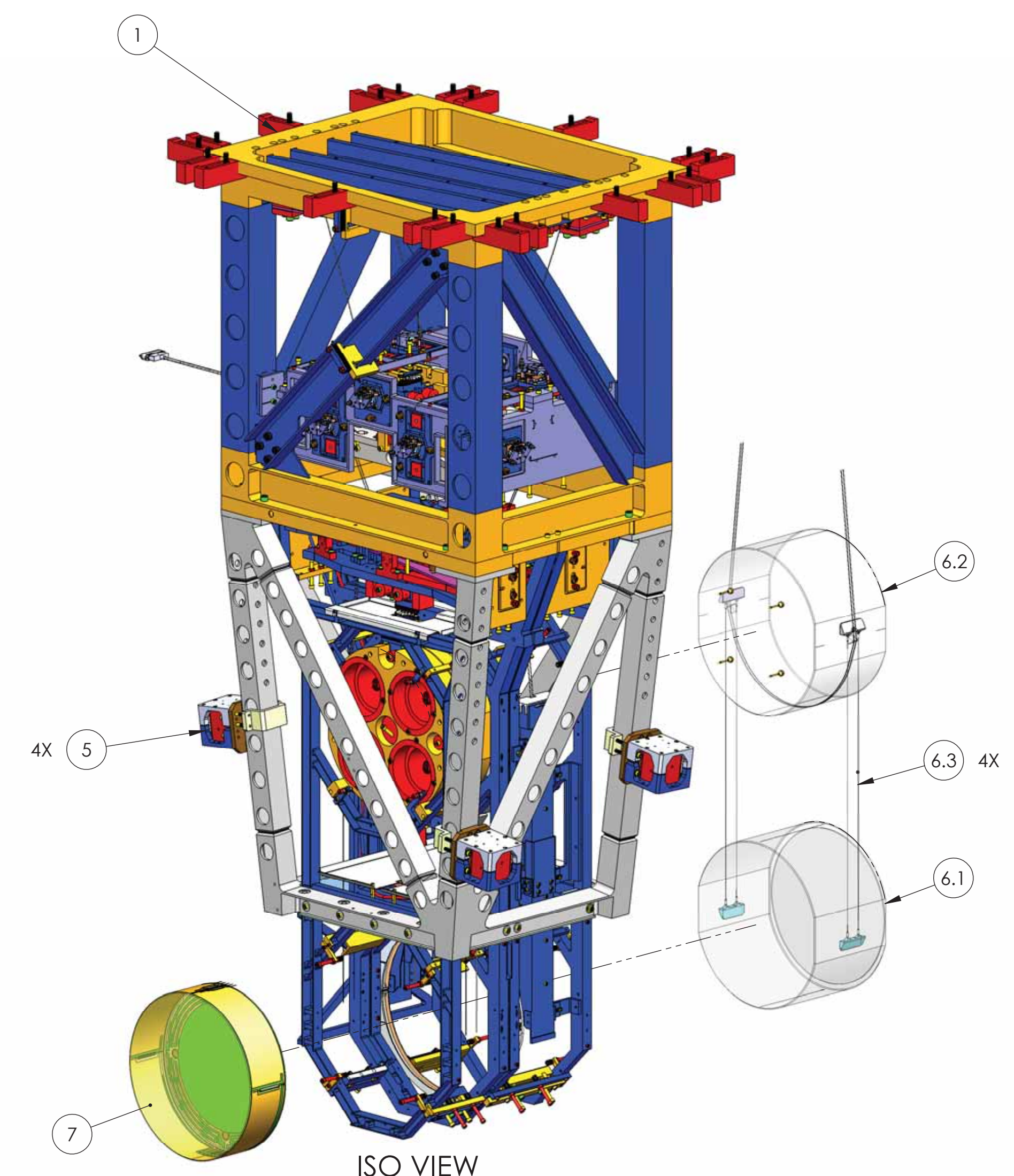
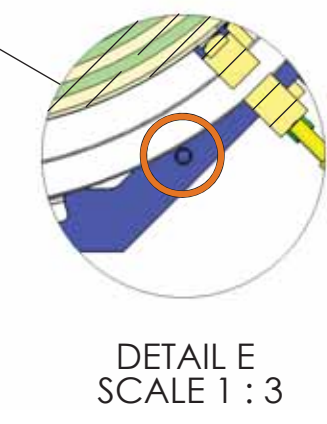
SEE SUB-ASSY. DRAWING FOR OPTIC SERIAL NO. DATA



NOTE: RING HEATER SHOULD OPEN AND CLOSE WITHOUT INTERFERENCE. IN CASE OF INTERFERENCE, REMOVE THE INDICATED FASTENER IN DETAIL "E", AND REATTACH AFTER RING HEATER IS CLOSED



SEE SUB-ASSY. DRAWING FOR OPTIC SERIAL NO. DATA



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	Full Complete/REQ
7	D1000980	αLIGO, TCP OPTICS WITH PRISM ASSEMBLY	N/A	1
6.3	D1001024	αLIGO, SUS, ETM/ITM QUAD SILICA FIBRE	N/A	4
6.2	D1001035	ITM PENULTIMATE MASS WITH PRISMS AND EARS	N/A	1
6.1	D0902456	ITM OPTICS WITH EARS ASSEMBLY	N/A	1
6	D1000760	αLIGO, SUS, ITM PRODUCTION MONOLITHIC ASSEMBLY	N/A	1
5	D1002424	VIBRATION ABSORBER ASSEMBLY	N/A	4
4	D1100785-620	WASHER, FLAT, .38 X .620 O.D.	NITRONIC 60	20
3	3AJ1.500-12CL	3/8-16 X 1.50 12PT BOLT	450 SSTL	20
2	D070056	αLIGO, SUS, QUAD N-PTYPE, QUAD DOG CLAMP	304 SSTL	20
1	D0901346-03	D0901346-03	N/A	1

LOCAL COORDINATES - REFERENCE

Xmm	Ymm	Zmm	YAW °
-200.0 mm	403.1 mm	-80.0 mm	90 °

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
DIMENSIONS ARE IN INCHES [MM]	
MATERIAL	--
FINISH	-- μinch

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SYSTEM: ADVANCED LIGO SUB-SYSTEM: SUS

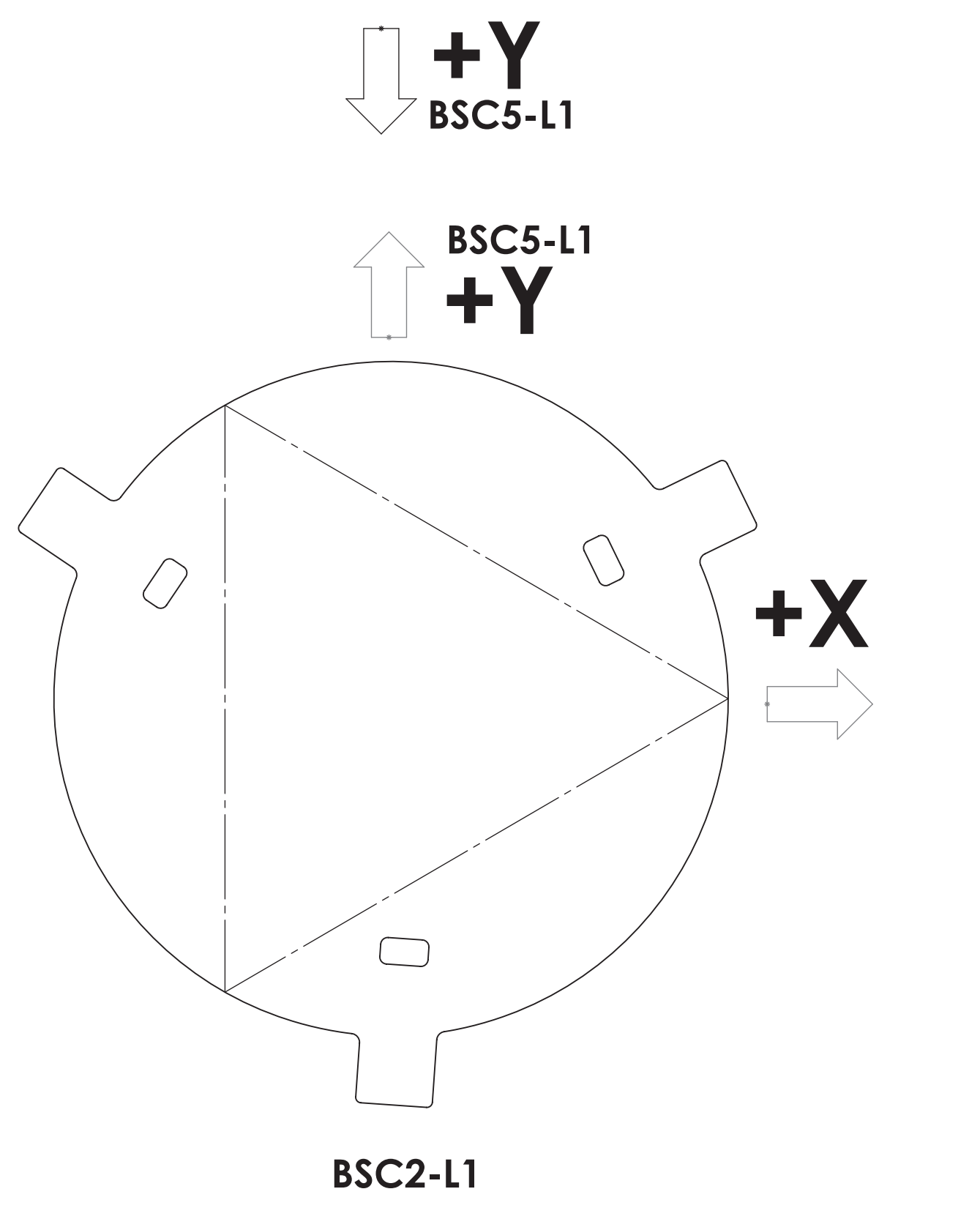
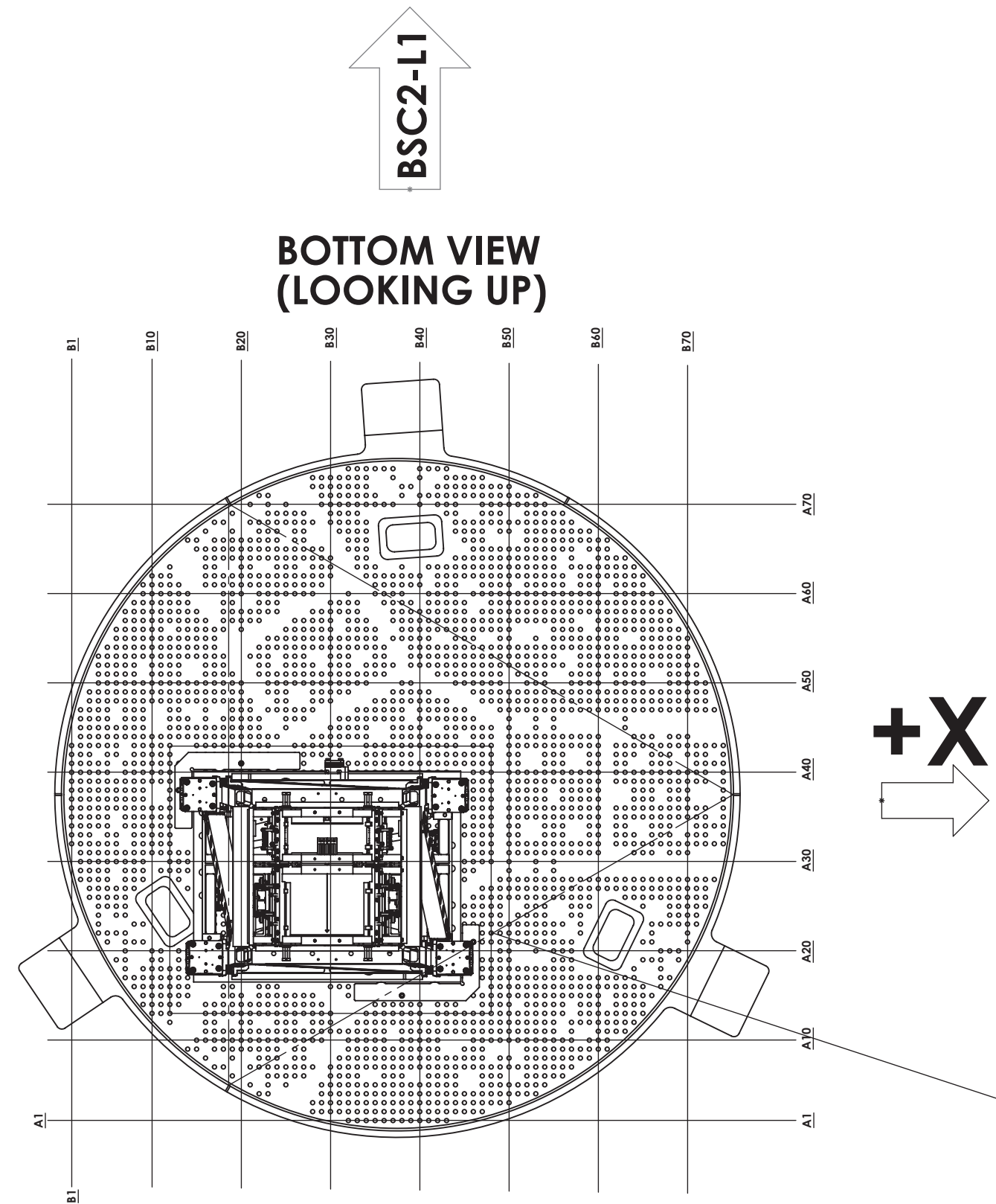
PART NAME: AdvLIGO SUS BSC1-L1, XYZ Local CS for ITMY

DESIGNER: M.HILLARD 18 Jan. 2012
DRAFTER: M.HILLARD 18 Jan. 2012
CHECKER: E.CHAVEZ 18 Jan. 2012
APPROVAL: C.TORRIE 18 Jan. 2012

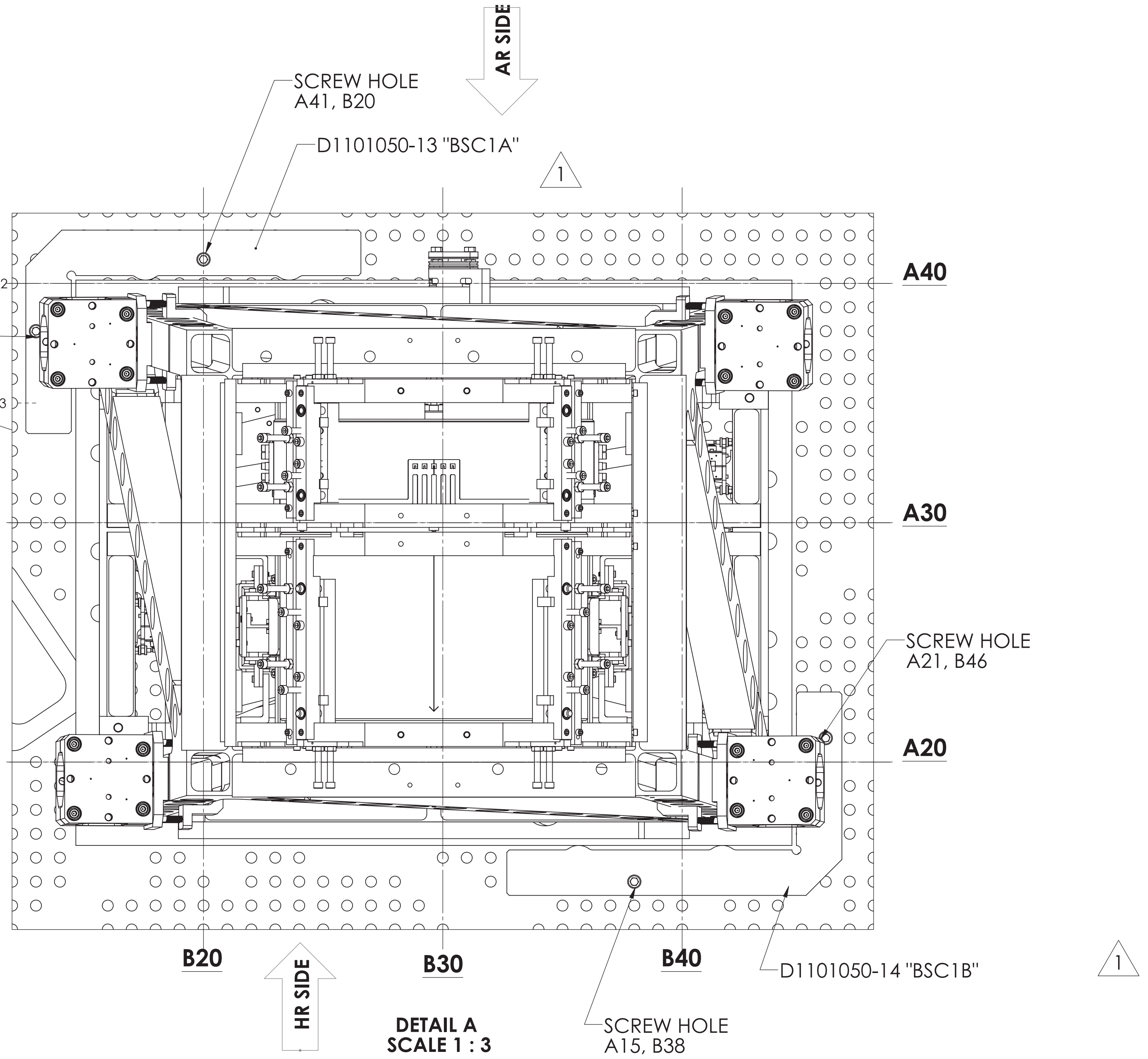
SIZE: DWG. NO. D D0900445

SCALE: 1:8 PROJECTION: SHEET 1 OF 5

D0900445-ADV-LIGO-SUS-BSC1-L1-XYZ-LOCAL-CS-FOR-ITMY-PART-PDM-REV-X-03-DRAWING-PDM-REV-X-009



**TOP VIEW
(LOOKING DOWN)
NOTE DIRECTION OF TRIANGLE**



**DETAIL A
SCALE 1 : 3**

**BOTTOM VIEW (LOOKING UP)
D0901516 OPTICAL TABLE SHOWN FOR QUAD POSITIONING
TEMPLATE LOCATION AND ORIENTATION ONLY. (DOG CLAMPS
AND MOUNTING HARDWARE NOT SHOWN FOR CLARITY)**

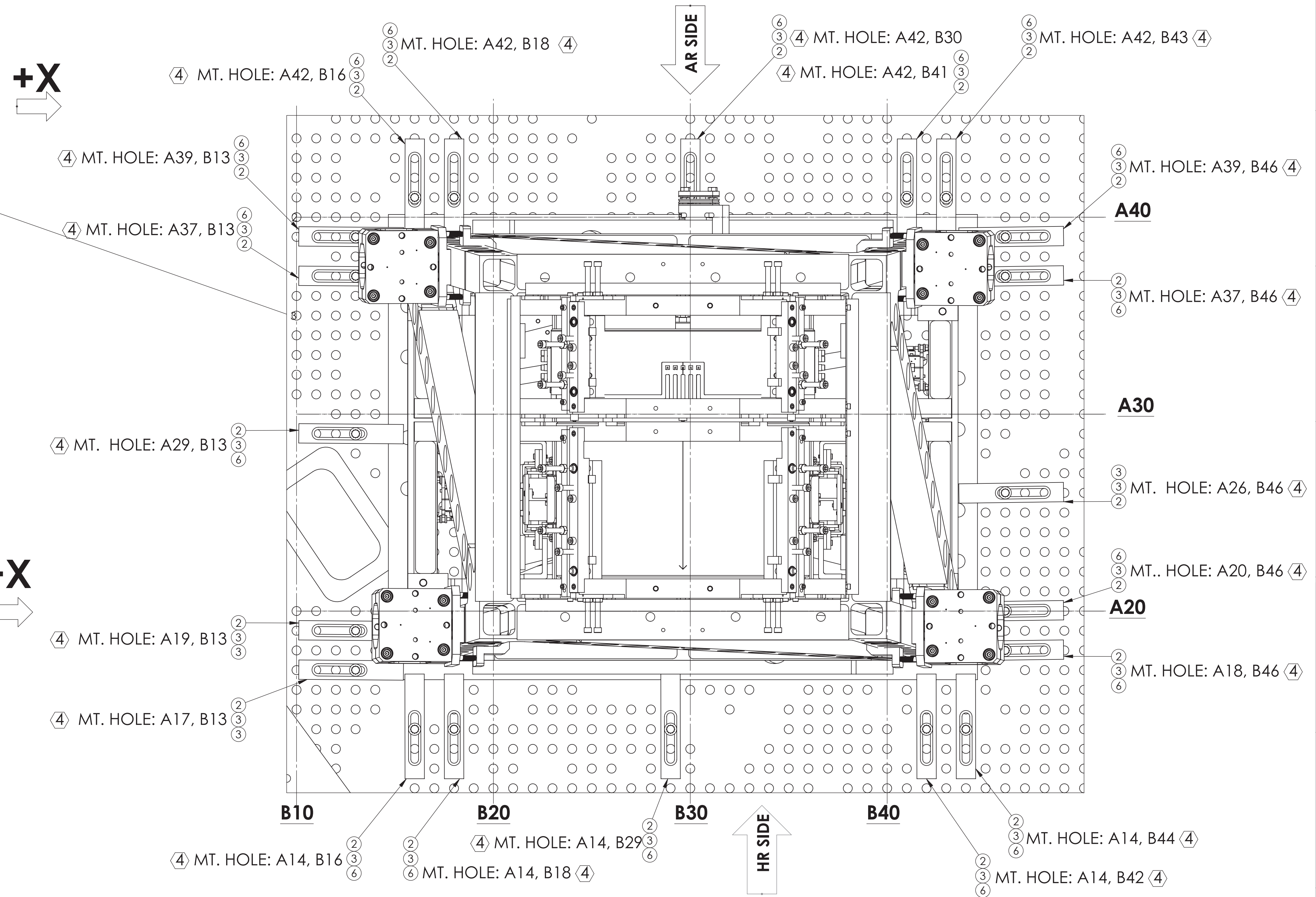
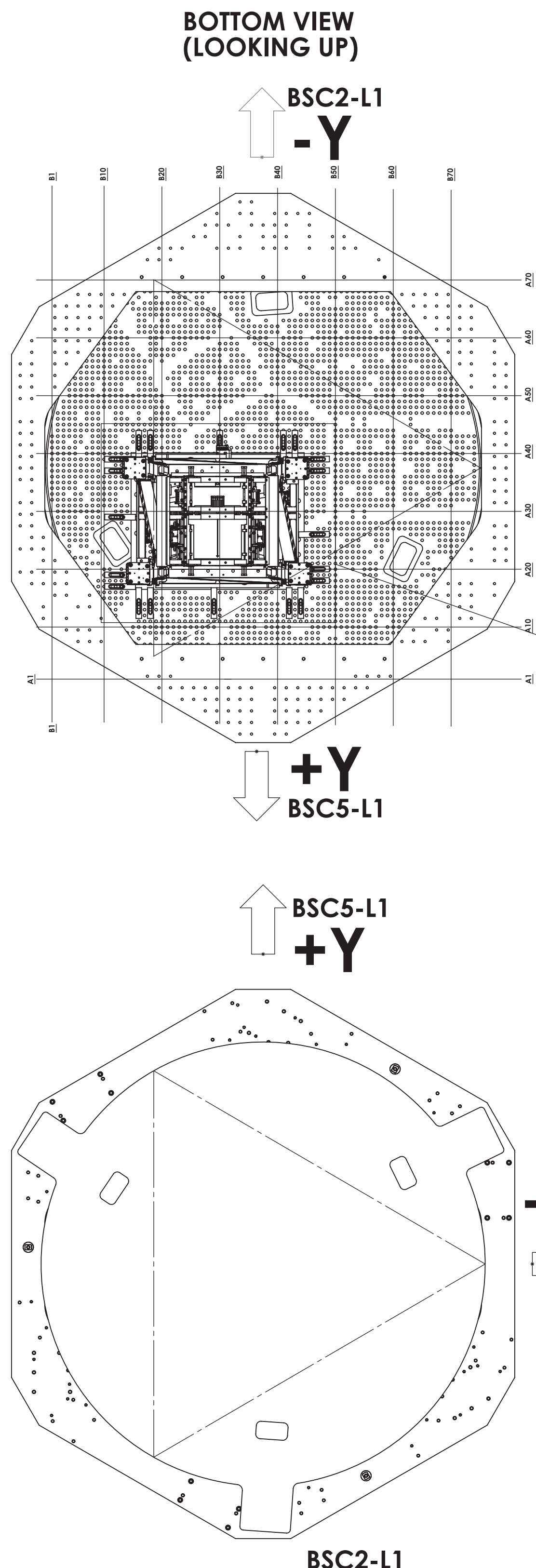
- 3. REFER TO D1101271 FOR OPTICAL TABLE HOLE TABULATION CONVENTION.
- 2. REFER TO G1000125 FOR ISI NAMING CONVENTION AND ORIENTATION CONVENTION.
- 1. USE ONLY ONE (1) ALIGNMENT TOOL. REMOVE AFTER ITMY IS CLAMPED TO ISI TABLE.

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE DWG. NO.	REV.
D	D0900445
SCALE: 1:16	SHEET 2 OF 5

D:\090445\A04\G0316\BSC1-L1.XYZ Local CS for ITMY.PART PDM REV: X.033. DRAWING PDM REV: X.009

8 7 6 5 4 3 2 1

H G F E D C B A



④ TIGHTEN ALL SCREWS TO 300 IN*lbs.

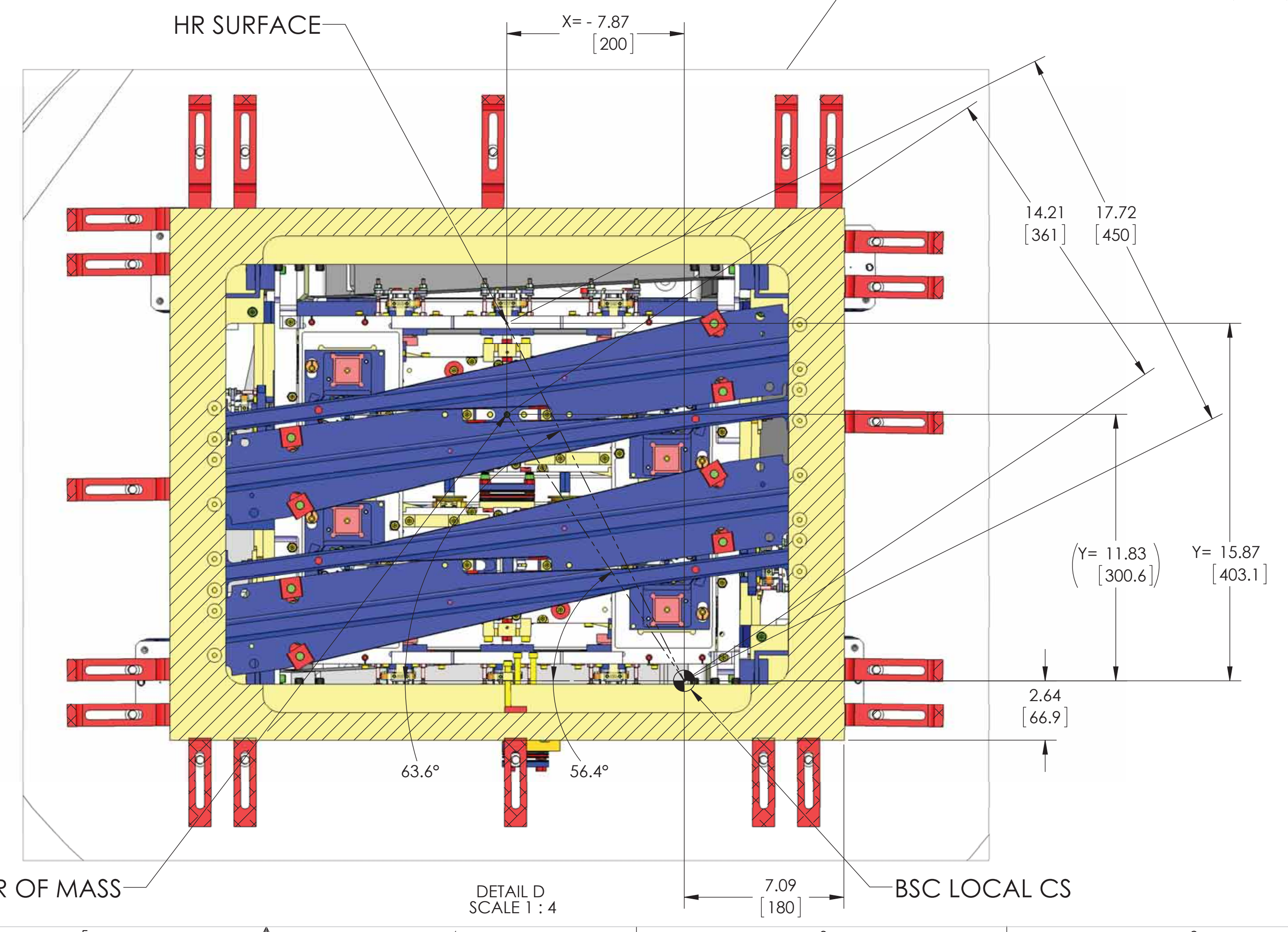
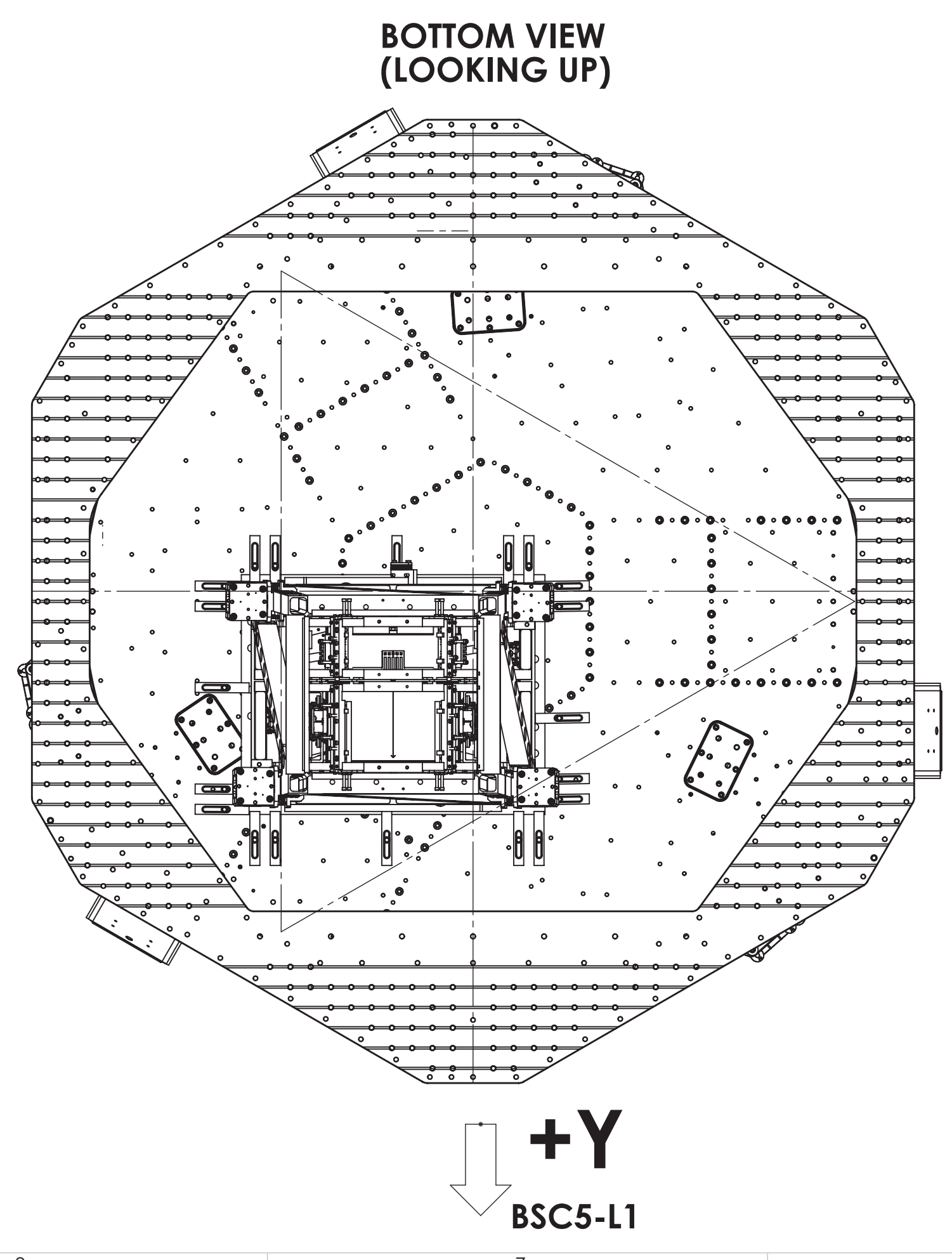
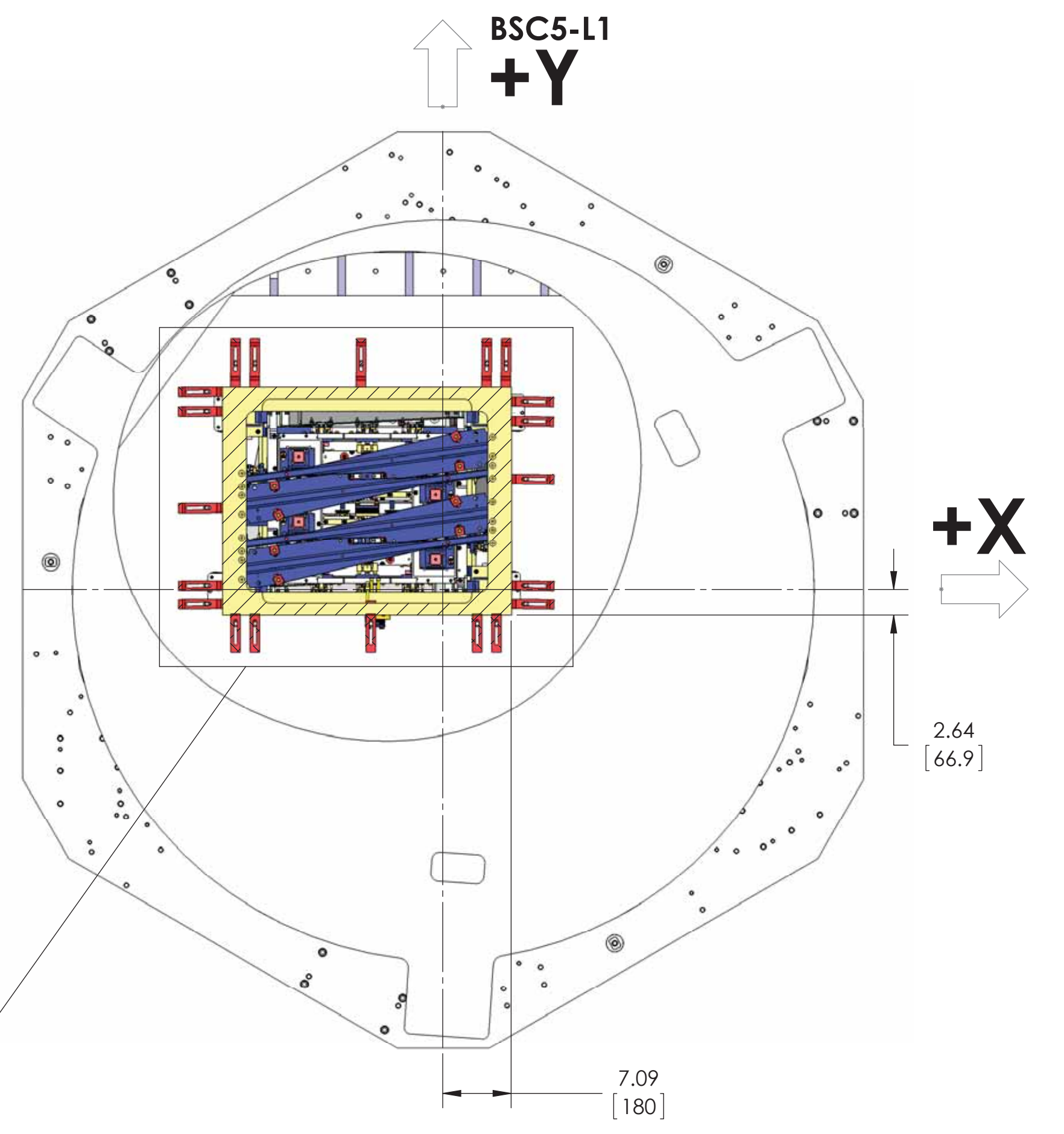
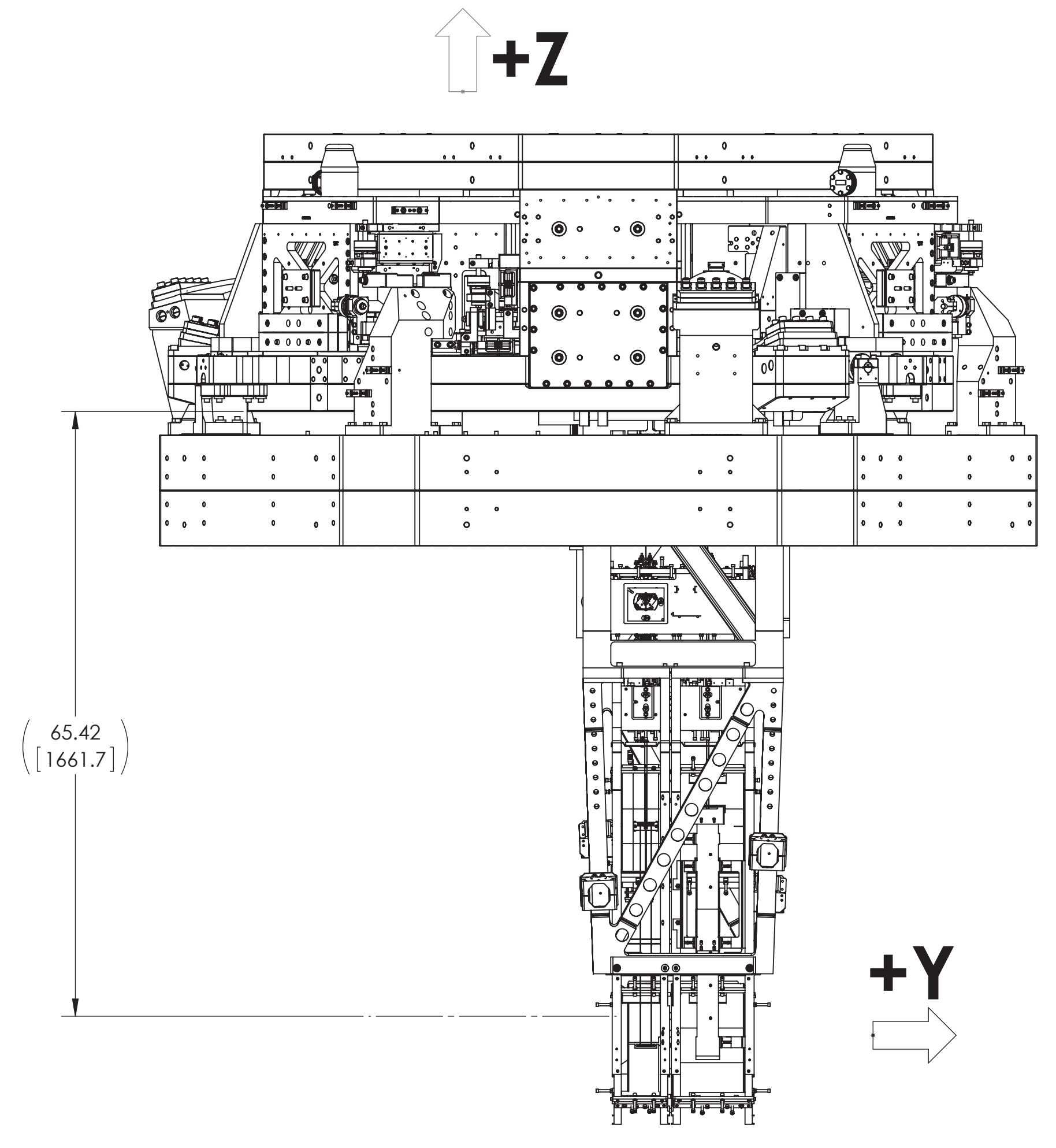
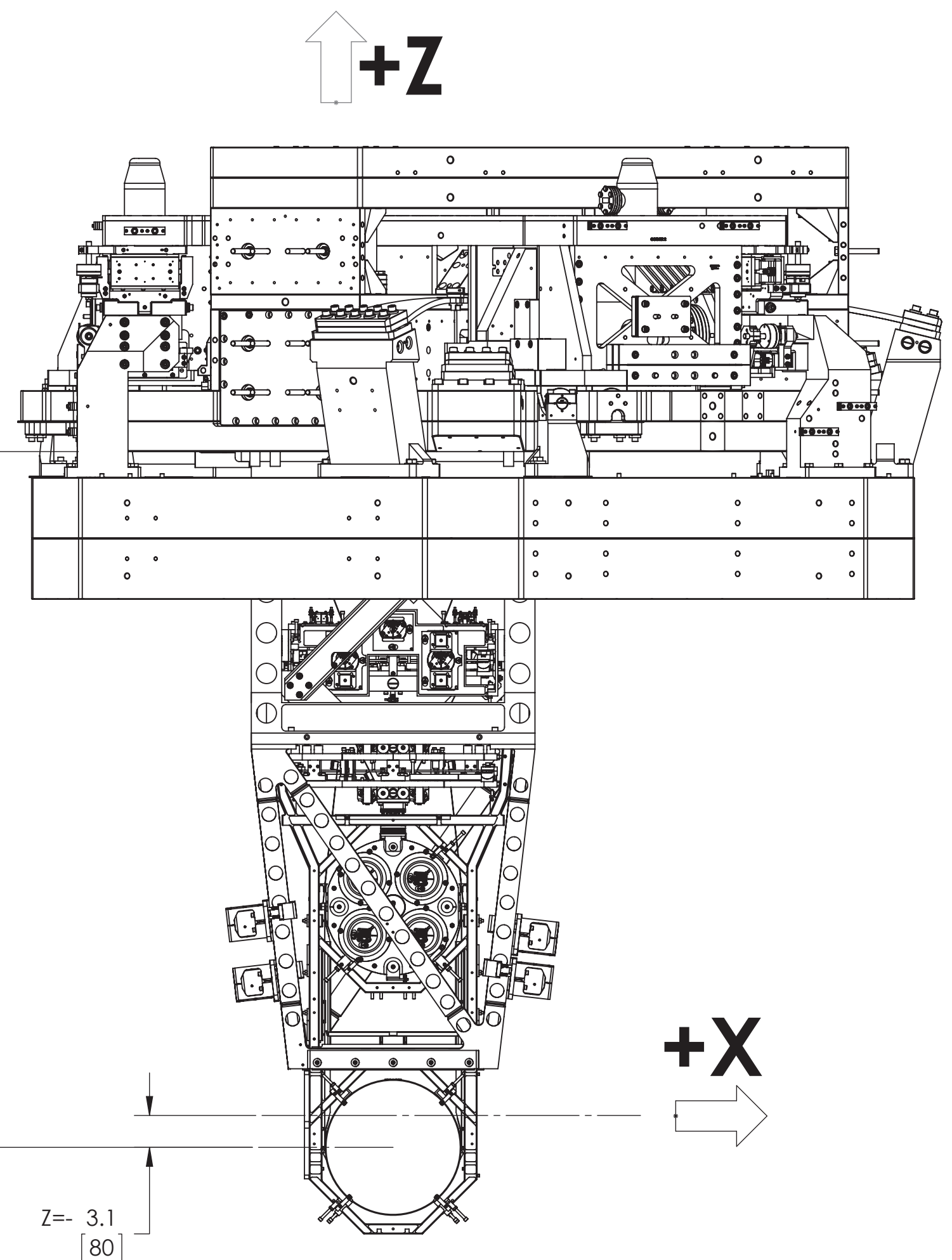
DETAIL B
SCALE 1:3
BOTTOM VIEW (LOOKING UP)
D0901516 OPTICAL TABLE SHOWN FOR QUAD POSITIONING, DOG CLAMP LOCATIONS,
AND ORIENTATION ONLY.
(VIBRATION ABSORBERS REMOVED FOR CLARITY)

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE DWG. NO.	REV.
D D0900445	v7
SCALE: 1:16	PROJECTION:
SHEET 3 OF 5	

8 7 6 5 4 3 2 1

H G F E D C B A

D0900445-A01/LGO-516-BSC-L1-XYZ Locs CS for ITM; PART PDM REV: X.03; DRAWING PDM REV: X.009



DIMENSIONS IN PARENTHESIS
(REFERENCE DIMENSIONS)
ARE FROM CENTER OF MASS

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SIZE	DWG. NO.	REV.
D	D0900445	v7
SCALE: 1:12	PROJECTION:	SHEET 4 OF 5

D0900445-ADM-LIGO-SUB-BSC5-L1-XYZ-LOCAL-CS-for-ITM-FABR-FDM-REV-K-03-DRAWING-FDM-REV-X-009

CABLE ROUTING SPECS.

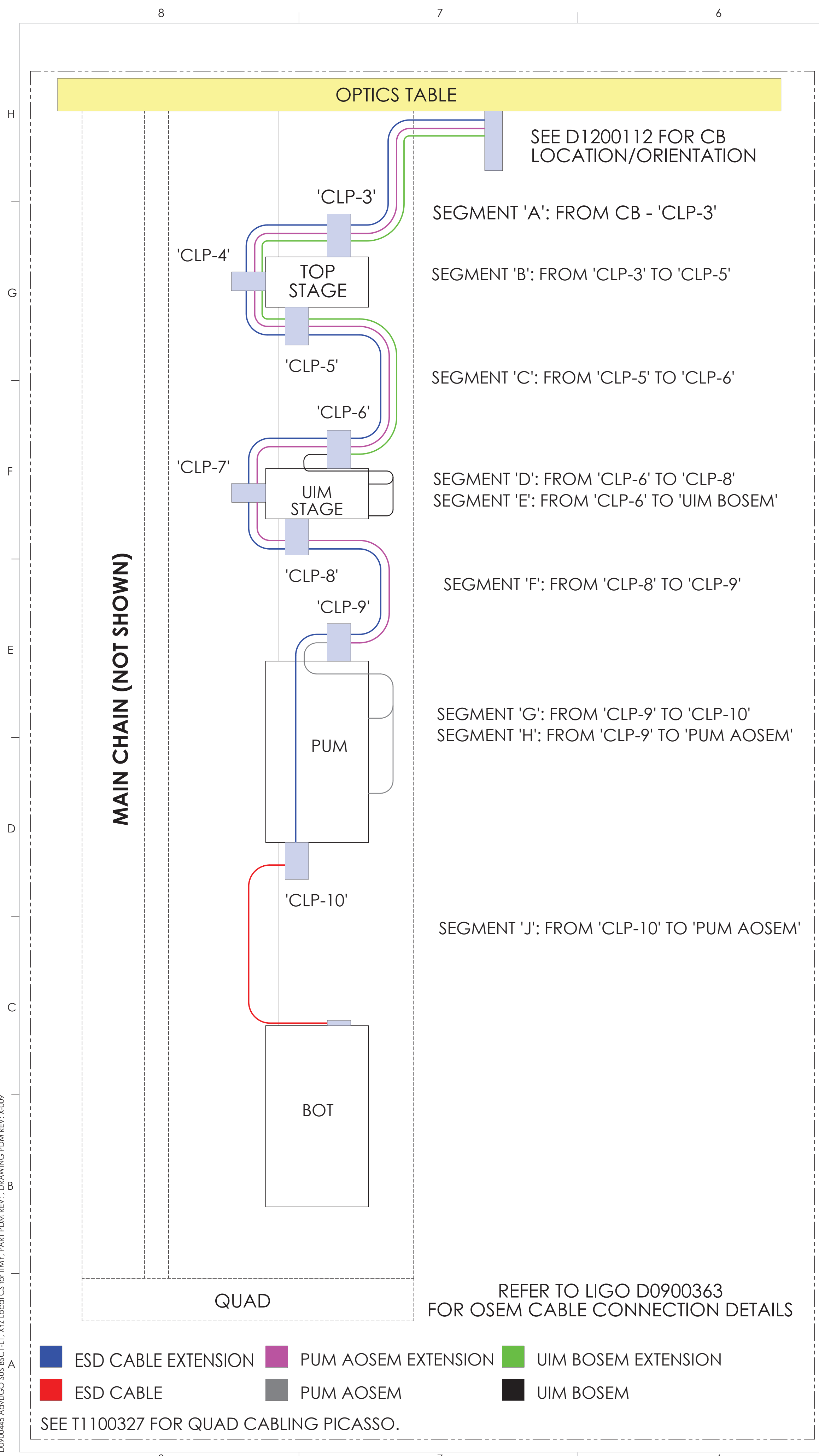


TABLE 1: BSC1-L1 ITMY CABLING SPECIFICATIONS, FROM/TO DES.

ROUTE NO.	FROM (OSEM POSITION)	TO CABLE EXTENSION	NOM. CABLE LENGTH (IN) (EXTENSION)	TO CB FLOOR DES.	QP LEG DES.	CABLE PART NO.	NOM. CABLE LENGTH (IN)
1	M0-F1	N/A	N/A	CB-1 (FIRST)	A	D1000234	88
	M0-F2				B		
	M0-F3				C		
	M0-SIDE				D		
2	R0-F1	N/A	N/A	CB-1 (SECOND)	A	D1000234	88
	R0-F2				B		
	R0-F3				C		
	R0-SIDE				D		
3	M0-LEFT	N/A	N/A	CB-2 (THIRD)	A	D1000234	88
	M0-RIGHT				B		
	R0-LEFT				C		
	R0-RIGHT				D		
4	UIM-UL	D1002522	121	CB-2 (FIRST)	A	D1002523	12
	UIM-LL				B		
	UIM-UR				C		
	UIM-LR				D		
5	PUM-UL	D1002522	156	CB-2 (SECOND)	A	D1002524	17
	PUM-LL				B		
	PUM-UR				C		
	PUM-LR				D		
6	D1002225	D1101472	175	CB-3	N/A	N/A	N/A

NOTE : FOR CABLE ROUTING DETAILS, CLAMP LOCATIONS/ORIENTATION, AND CABLE DIAGRAMS, SEE LIGO D0900363 SHEETS 4 -9.

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SIZE DWG. NO. **D0900445** REV. **v7**

SCALE: 1:16 PROJECTION: SHEET 5 OF 5